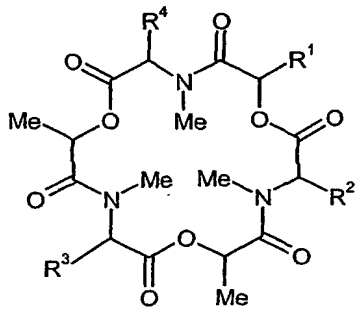
Patent claims

1. Cyclic depsipeptides of the general formula (I) and salts thereof



(I)

in which

R^1 represents nitrobenzyl or R'R"N-benzyl

where

R' and R" independently of one another each represent hydrogen, optionally substituted C_1-C_4-alkyl, formyl, C_1-C_4-alkoxy-C_1-C_4-alkyl, C_1-C_4-alkoxycarbonyl, hydroxy-C_1-C_2-alkylsulphonyl-C_1-C_2-alkyl

or

R' and R" together with the nitrogen atom to which they are attached form an optionally substituted mono- or polycyclic saturated or unsaturated heterocycle which is optionally bridged and/or spirocyclic and which contains 1 to 3 further heteroatoms from the group consisting of nitrogen, oxygen and sulphur, or R' and R" together form C_3-C_5-alkylenemonocarbonyl or an optionally substituted diacyl radical of a C_4-C_6-dicarboxylic acid, and

R^2, R^3 and R^4 independently of one another represent C_1-C_4-alkyl,

and optical isomers and racemates thereof.

2. Depsipeptides of the general formula (I) and salts thereof according to Claim 1

in which

R^1 represent nitrobenzyl or R'R"N-benzyl

where

R' and R" independently of one another each represent hydrogen, C_1-C_3-alkyl, in particular methyl, ethyl, C_1-C_3-alkoxy-C_1-C_3-alkyl, in particular methoxyethyl, 2-hydroxyethylsulphonyl-C_1-C_2-alkyl, in particular 2-hydroxyethylsulphonylethyl or

R' and R" together with the nitrogen atom to which they are attached represent N-pyrrolidino, N-piperidino, N-piperazino, N-morpholino, N-2,6-dimethylmorpholino, N-thiomorpholino, N-pyrazolo, N-imidazolo, 2-oxopyrrolidin-1-yl, 2-oxopiperidin-1-yl, 2-oxoazepan-1-ylmethyl, succinimino, maleinimino or glutarimino,

R^2, R^3 and R^4 independently of one another represent C_1-C_4-alkyl,

and optical isomers and racemates thereof.

3. Depsipeptides of the general formula (I) and salts thereof according to Claim 1

in which

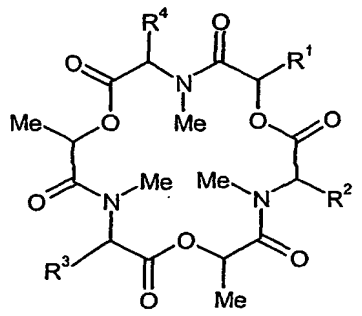
R^1 represents 4-nitrobenzyl, 4-aminobenzyl, 4-morpholinobenzyl, 4-hydroxyethylsulphonylethylaminobenzyl,

R^2 and R^4 independently of one another represent C_1-C_4-alkyl, in particular methyl, isopropyl, isobutyl or sec-butyl,

R^3 represents methyl or ethyl,

and optical isomers and racemates thereof.

4. Process for preparing the cyclic depsipeptides of the general formula (I) and salts thereof



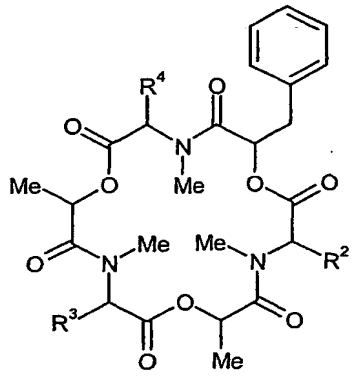
(I)

in which

R^1, R^2, R^3 and R^4 are as defined under item 1

which comprises

a) in a first step, nitrating the cyclic depsipeptides of the general formula (II) and salts thereof



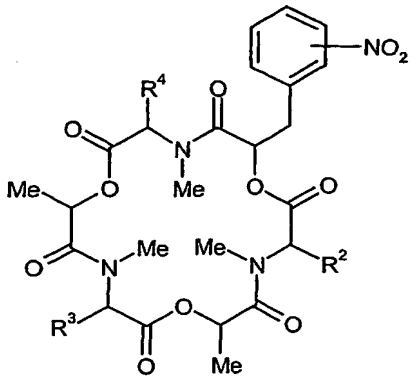
(II)

in which

R^2, R^3 and R^4 are as defined under item 1

in the presence of a nitrating agent and, if appropriate, in the presence of a diluent, and

b) if appropriate, in a second step, reducing the nitro group in the cyclic depsipeptides of the general formula (III) or salts thereof obtained in this manner



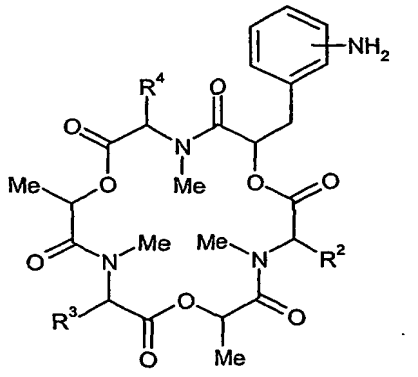
(III)

in which

R^2, R^3 and R^4 are as defined under item 1

in the presence of a reducing agent and, if appropriate, in the presence of a diluent, and

c) if appropriate, in a third step, aminoalkylating the cyclic depsipeptides of the general formula (IV) and salts thereof



(IV)

in which

R^2, R^3 and R^4 are as defined under item 1

to introduce the radicals R' and R", in the presence of a suitable aldehyde and a reducing agent and, if appropriate, in the presence of a diluent, or

N-alkylating these depsipeptides in the presence of a suitable alkylating agent and a basic reaction auxiliary and, if appropriate, in the presence of a diluent, or

N-acylating these depsipeptides in the presence of a suitable acylating agent and a basic reaction auxiliary and, if appropriate, in the presence of a diluent.

5. Compositions comprising a cyclic depsipeptide of the formula (I) according to Claim 1.

6. Use of cyclic depsipeptides of the formula (I) according to Claim 1 for controlling endoparasites.

7. Use of cyclic depsipeptides of the formula (I) according to Claim 1 for preparing medicaments.

8. Method for controlling endoparasites which comprises allowing cyclic depsipeptides of the formula (I) according to Claim 1 to act on endoparasites and/or their habitat.